



Gulf of Mexico Harmful Algal Bloom Bulletin

19 December 2005

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 15, 2005

Conditions Report

Harmful algal blooms have been detected in Dixie and Levy Counties, from southern Pinellas to northern Sarasota County, and in Monroe County. Patchy none to very low impacts are possible today through Thursday in Dixie, Levy, southern Pinellas, and northern Sarasota Counties. In Monroe county patchy very low to low impacts are possible today through Thursday for gulfside Lower Keys, with none to very low impacts possible for oceanside Lower Keys.

Analysis

Bloom persists along the coast in Dixie and Levy counties, from Pinellas to Sarasota County, and in the Florida Keys. Clouded imagery obscures bloom extent for Southwest Florida. Concentrations have continued to decrease along the southwest Florida coast. Recent sampling results (12/12, FWRI) indicate that the bloom is no longer present alongshore Charlotte, Lee, and Collier Counties. However, elevated concentrations remain offshore of Lee and Collier County with high cell counts of *K.brevis* reported 10 miles offshore of Boca Grande (12/9, FWRI). Imagery on December 15 indicates 3 distinct high chlorophyll patches offshore from Lee to Monroe County. The northernmost feature is located offshore of Lee County from 26° 23'N 82° 36'W to 26° 9'N 82° 34'W along its north-south axis with concentrations greater than 10 μ g/L. The second feature has chlorophyll concentrations as high as 10 μ g/L and is located offshore of Collier County with a northern extent of 26° 0'N 82° 16'W and a southern extent of 25° 44'N 82° 16'W. The third feature is also present on imagery from December 17 and is located offshore of Monroe County from 81° 56'W 25° 29'N to 82° 12'W 25° 12'N along its east-west axis with concentrations as high as 5 μ g/L. Patches may have moved as much as 25km south since December 15. Sampling is recommended.

The bloom continues to dissipate on and offshore in Dixie and Levy Counties. Recent sampling results indicate present to very low

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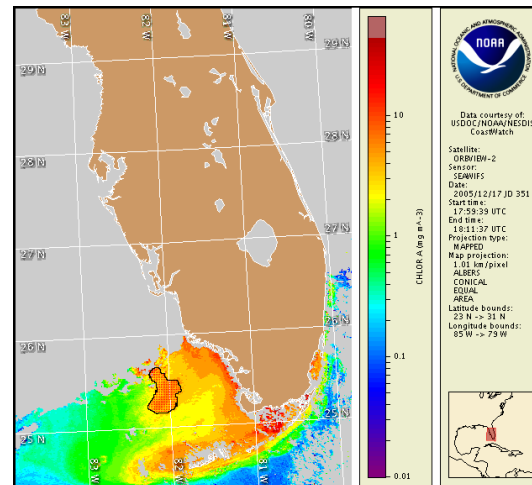
1. Data are restricted to civil marine applications only; i.e. federal, state, and local government use/distribution is permitted.
2. Image products may be published in newspapers. Any other publishing arrangements must receive OrbImage approval via the CoastWatch Program.

concentrations of *K.brevis* (12/12, FWRI).

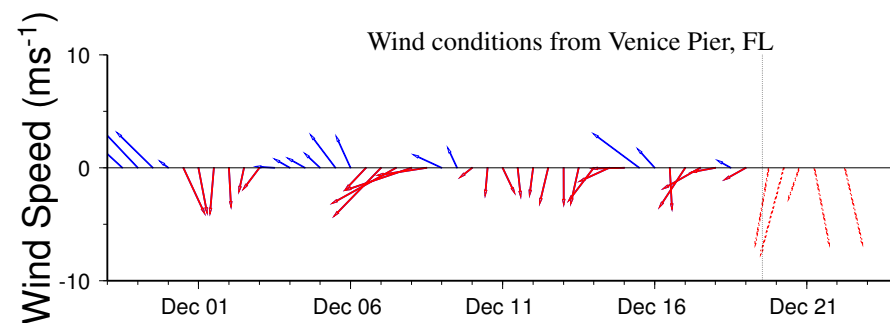
North to northeasterly winds throughout the week may cause slight southerly transport of the offshore blooms. Minimal impacts are expected along the coast.

In the Florida Keys *K.brevis* has been found in patches from Marathon to Key West. Low to medium concentrations of *K.brevis* were reported offshore gulfside from Cudjoe Key to Key West (12/12, MML), with very low to low concentrations reported on oceanside from Cudjoe Key to Key West and at Marathon. North to northeasterly winds throughout the week may increase impacts along the gulfside and cause slight onshore and westerly transport. Minimal impacts expected along oceanside Lower Keys.

~Keller, Stolz



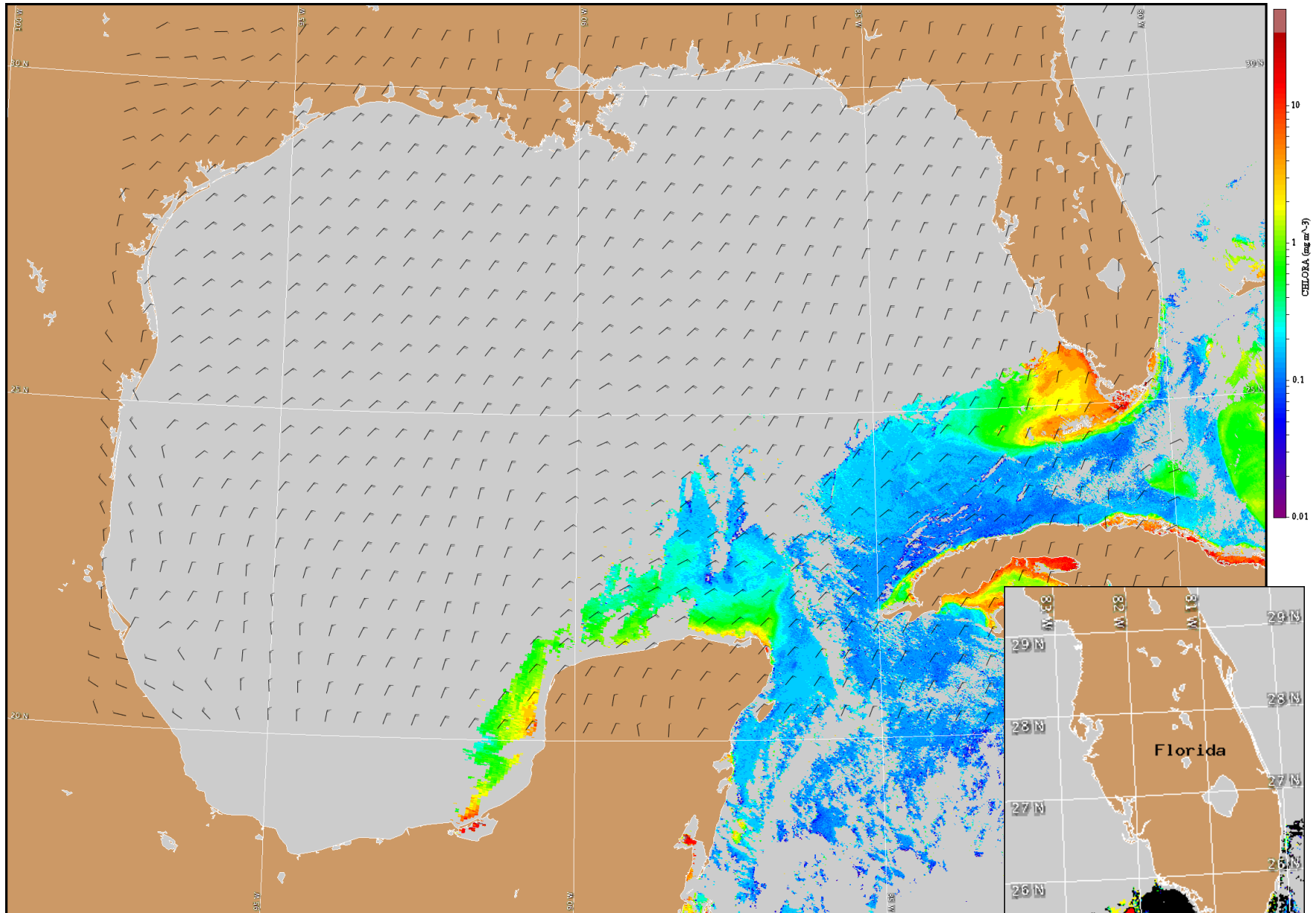
Satellite chlorophyll image with possible HAB areas shown by red polygon(s).



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: North to northeasterly winds today through Thursday at 10-15 knots (5-8 m/s).

FL Keys: North to northeasterly winds today through Thursday at 10-15 knots (5-8 m/s).



Satellite chlorophyll image and forecast winds for December 20, 2005 06Z.

Verified HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

